

PARSONS at OPEN CAMPUS  
Continuing Education in Art & Design  
RHINO I  
PCDD 0202; CRN 4188  
Spring 2020  
1:00PM-3:50PM/S, 66 Fifth Ave, Rm 005

Mia Tsiamis  
tsiamism@newschool.edu

### Course Description

Introduction to 3D modeling techniques using Rhino 3D—a powerful, versatile modeling software program applicable to design fields including architecture, sculpture, and interior, furniture product, and jewelry design. Rhino is intuitive, easy to learn, and compatible with many other software packages. A wide array of plug-ins provide for an ever-evolving range of functions with Rhino. In-class projects enables students to learn the fundamentals of digital design beginning with 2D drawing and progressing to 3D volumetric modelling. Students will also gain experience in translating digital models into physical objects using digital fabrication methods, including laser cutting and 3D printing. Digital modelling skills developed in this class provide students with a “toolkit” that serves as a foundation for further mastery of this important industry software.

### Course Requirements/Assignments/Assessed-Graded Activities

Participation in in-class projects:

- 2D Drawing
- Free-form surface
- Compound volumes
- Final project

### Final Grade Calculation

Participation /Attendance	30%
In-class Projects	70%

### Recommended Reading & Resources:

- Rhino forum - <https://discourse.mcneel.com/>
- Panelling Tools primer - <https://wiki.mcneel.com/media/labs/panelingtools.pdf>
- Rhino/Grasshopper add-ons - <http://www.food4rhino.com/>

### Materials and Supplies:

At least two of the in-class projects will result in 3D models that can be 3D printed. Any costs associated with printing will be the responsibility of the student.

### Learning Outcomes

By the successful completion of this course, students will be able to:

1. The Rhino interface and general settings
2. Curve and surface creation and editing
3. 2D surface patterning
4. Solid modeling, unfolding 3D models
5. Preparation for 2D planar fabrication
6. Introduction to Grasshopper

## Course Outline

CLASS 1	1/25	<ul style="list-style-type: none"><li>– Introductions and inspiration</li><li>– Rhino UI</li><li>– Drawing basics (2D)</li></ul>	
CLASS 2	2/1	<ul style="list-style-type: none"><li>– Drawing basics continued</li><li>– Transformations, curve editing, curve analysis</li></ul>	
CLASS 3	2/8	<ul style="list-style-type: none"><li>– Introduction to NURBS surfaces</li><li>– Surface creation methods</li><li>– Surface editing</li></ul>	
CLASS 4	2/15	<ul style="list-style-type: none"><li>– Working session: Surfaces</li><li>– Record history</li></ul>	
CLASS 5	2/22	<ul style="list-style-type: none"><li>– Introduction to primitive volumes</li><li>– Volume editing</li></ul>	
CLASS 6	3/1	<ul style="list-style-type: none"><li>– 3D transformations</li><li>– Boolean operations</li></ul>	
CLASS 7	3/7	<ul style="list-style-type: none"><li>– Rhino for Digital Fabrication</li><li>– Contours and laser cutting</li><li>– 3D print check</li></ul>	
CLASS 8	3/14	<ul style="list-style-type: none"><li>– Panelling tools</li></ul>	
CLASS 9	3/28	<ul style="list-style-type: none"><li>– Miscellaneous topics / catch-up and review</li></ul>	
CLASS 10	4/4	<ul style="list-style-type: none"><li>– Final project presentation</li></ul>	

Parsons/New School Educational Resources: <http://www.newschool.edu/about/resources-services/>

University Libraries: <http://library.newschool.edu>

Student Disability Services: In keeping with the University's policy of providing equal access for students with disabilities, any student with a disability who needs academic accommodations is welcome to meet with faculty privately. All conversations will be kept confidential. Students requesting any accommodations will also need to meet with in the director of our Student Disability Services, who will conduct an intake, and if appropriate, provide an academic accommodation notification letter for you to bring to me. I will review the letter with you and discuss recommended accommodations in relation to this course.

- Contact: Nicholas Faranda, [farandan@newschool.edu](mailto:farandan@newschool.edu), MAT, Ed.M, Ed.M ,
- Student disabilities: [studentdisability@newschool.edu](mailto:studentdisability@newschool.edu), 212.229.5626

You may also access more information through the University's web site at <http://www.newschool.edu/student-disability-services/>.

#### Grading Standards:

Students are expected to attend all classes and participate in class projects. Most project work will be done in class. If a project is not completed during class time, students will be responsible for finishing the project on their own time. Students will be evaluated based on level of completion of in-class projects.

#### Non-credit and Certificate Continuing Education students:

- Certificate students:

AP = Approved

NG = No Grade

- Non-credit students:

AP = Approved

NG = No Grade

#### Credit students:

Grade descriptions from Parsons Student Handbook

- A Work of exceptional quality
- A- Work of high quality
- B+ Work of high quality, higher than average abilities
- B Very good work that satisfies goals of the course
- B- Good work
- C+ Average work, understanding of course material
- C Adequate work; passable
- C- Passing work but below good academic standing
- D Below average work; does not fully understand the assignments
- F Failure, no credit

#### Special Grade Status – these only apply to credit enrolled students:

- I Temporary Incomplete: indicates failure to complete assigned work.
- W Official Withdrawal: written request must be presented in person at the Registrar's Office by the published deadline.
- Z Unauthorized Withdrawal: Issued by an instructor to a credit student who has not attended or not completed all required work in a course but did not officially withdraw. Faculty may also determine a letter grade as opposed to a "Z" based on student progress and attendance in the course.

GM Grade Not Reported for Student

#### Divisional, Program and Class Policies

#### Responsibility

Students are responsible for all assignments, even if they are absent. Late papers, failure to complete the readings assigned for class discussion, and lack of preparedness for in-class discussions and presentations will jeopardize your successful completion of this course.

#### Participation

Class participation is an essential part of class and includes: keeping up with reading, contributing meaningfully to class discussions, active participation in group work, and coming to class regularly and on time.

#### Canvas

Use of Canvas may be an important resource for this class. Students should check it for announcements before coming to class each week.

#### Attendance

Parsons' attendance guidelines were developed to encourage students' success in all aspects of their academic programs. Full participation is essential to the successful completion of coursework and enhances the quality of the educational experience for all, particularly in courses where group work is integral; thus, Parsons promotes high levels of attendance. Students are expected to attend classes regularly and promptly and in compliance with the standards stated in course syllabi.

Students who register after a class has begun are responsible for any missed assignments and coursework. Students who must miss a class session should notify the instructor and arrange to make up any missed work as soon as possible. A student who anticipates an extended absence should immediately inform the faculty and his or her program advisor. Advance approval for an extended absence is required to ensure successful completion of the course. Withdrawal from the course may be recommended if the proposed absence would compromise a student's ability to meet course objectives.

While attendance is just one aspect of active participation, absence from a significant portion of class time may prevent the successful attainment of course objectives. A significant portion of class time is generally defined as the equivalent of three absences, or 20%, of class time. Lateness or early departure from class may be recorded by the instructor as one full absence. Students may be asked to withdraw from a course if habitual absenteeism or tardiness has a negative impact on the class environment.

#### Absences

You may fail a course if you have been absent for a significant portion of class time. A significant portion of class time is defined by the length of the time your course meets:

Example: 9, 10, 12 week class (9, 10, 12 sessions) – 3 absences  
5, 6 week class (5, 6 sessions) – 2 absences

#### Religious Absences and Equivalent Opportunity

Pursuant to Section 224--a of the New York State Education Laws, any student who is absent from school because of his or her religious beliefs will be given an equivalent opportunity to register for classes or make up any examination, study, or work requirements which he or she may have missed because of such absence on any particular day or days. The student must inform the instructor at the beginning of the course of any anticipated absences due to religious observance.

#### Late Arrivals/Early Departures

Lateness or early departure from class may also translate into one full absence. Students arriving fifteen minutes late to any class session will be counted as tardy. 3 late arrivals or early departures equal 1 absence. Arriving thirty minutes late for any class session will be counted as an absence.

Instructors will take attendance at the beginning of each class. Students are responsible for being in class before the designated start time and informing faculty of their arrival if late. Failure to do so may result in the instructor not marking the student present for the class.

Permission to leave class early should be given by faculty.

### Extended Absences

Students who must miss a class session should notify the instructor and arrange to make up any missed work as soon as possible. A student who anticipates an extended absence must immediately inform the faculty and explain any extenuating circumstances in writing. Advance approval from the director of your program, for an extended absence, is required to ensure your successful completion of the course. Depending upon the circumstances, the program director will recommend a leave of absence or withdrawal from program if the proposed absence would compromise a student's ability to successfully meet course requirements and standards.

### Delays

In rare instances, faculty may be delayed arriving to class. If your faculty has not previously communicated expected late arrival, students must wait a minimum of thirty minutes in class before leaving. In the event of an unexpected absence, where faculty will be missing the class entirely, either the faculty and/or someone from the Continuing Education office will inform students by email or phone. In this case, a note will be left on the classroom door informing students.

### Code of Conduct

LANGUAGE: The language of instruction at Parsons School of Design is English; only English is allowed during class time and in the classroom unless otherwise instructed by faculty.

Cell Phones: Cell phones are not to be used in the classroom unless directly connected to work being done (i.e. use of photographs, doing research or viewing/listening to programs or music as part of the coursework). Faculty have the right to ask for your phone during class time if there is repeated infringement of this rule.

### Academic Integrity

This is the University's Statement on Academic Integrity: "Plagiarism and cheating of any kind in the course of academic work will not be tolerated. Academic honesty includes accurate use of quotations, as well as appropriate and explicit citation of sources in instances of paraphrasing and describing ideas, or reporting on research findings or any aspect of the work of others (including that of instructors and other students). These standards of academic honesty and citation of sources apply to all forms of academic work (examinations, essays, theses, computer work, art and design work, oral presentations, and other projects)."

It is the responsibility of students to learn the procedures specific to their discipline for correctly and appropriately differentiating their own work from that of others. Compromising your academic integrity may lead to serious consequences, including (but not limited to) one or more of the following: failure of the assignment, failure of the course, academic warning, disciplinary probation, suspension from the Program, or dismissal from the Program.

Resources regarding what plagiarism is and how to avoid it can be found on the Learning Center's website:

<http://www.newschool.edu/university-learning-center/student-resources/>

Intellectual Property Rights: <http://www.newschool.edu/provost/accreditation-policies/>

### Guidelines for Written Assignments

Plagiarism is the use of another person's words or ideas in any academic work using books, journals, Internet postings, or other student papers without proper acknowledgment. For further information on proper acknowledgment and plagiarism, including expectations for paraphrasing source material and proper forms of citation in research and writing, students should consult the Chicago Manual of Style (cf. Turabian, 6<sup>th</sup> edition).

Students must receive prior permission from instructors to submit the same or substantially overlapping material for two different assignments. Submission of the same work for two assignments without the prior permission of instructors is plagiarism.

### Guidelines for Studio Assignments

Work from other visual sources may be imitated or incorporated into studio work if the fact of imitation or incorporation and the identity of the original source are properly acknowledged. There must be no intent to deceive; the work must make clear that it emulates or comments on the source as a source. Referencing a style or concept in otherwise original work does not constitute plagiarism. The originality of studio work that presents itself as “in the manner of” or as playing with “variations on” a particular source should be evaluated by the individual faculty member in the context of a critique.

Incorporating ready-made materials into studio work as in a collage, synthesized photograph or paste-up is not plagiarism in the educational context. In the commercial world, however, such appropriation is prohibited by copyright laws and may result in legal consequences.

#### Student Course/Faculty Evaluations

During the last two weeks of the semester, students are asked to provide feedback for each of their courses through an online survey. They cannot view grades until providing feedback or officially declining to do so. Course evaluations are a vital effort where students can speak about the learning experience and is completely anonymous. It is an important process that provides valuable data about the successful delivery and support of a course or topic to both the faculty and administrators. Instructors rely on course evaluations for feedback on the course and teaching methods, so they can understand what aspects of the class are most successful in teaching students, and what aspects might be improved or changed in future. Without this information, it can be difficult for an instructor to reflect upon and improve teaching methods and course design. In addition, program/department chairs and other administrators review course surveys. An email will be sent to you at the email address you registered with – and within that email will be an personalized/individual link that will take you to your course evaluations. Please help us do what we do better, by participating in this end of term process.